## Make El Niño Pudding and Fall into a Black Hole: An Integrated, Multi-vector Approach to NASA Educational Outreach

By

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Learning about space science and technology is fun. This assumption is the first principle of The Space Place, a coordinated NASA educational outreach program that uses the internet and print media, as well as partnerships with professional educator associations, national youth organizations, and community organizations to deliver rich and innovative messages about space science and technology. The Space Place was begun in 1998 as a child-oriented web site (http://spaceplace.jpl.nasa.gov) to present ideas for simple "make and do" activities and fun facts related to the technology validation space missions of NASA's New Millennium Program. The outreach effort has now grown to include many other space science and Earth observing missions. It has also greatly broadened its reach. For example, space-mission-related activity articles are published monthly in *The Technology Teacher*, the educator's journal of the International Technology Education Association, as well as several large city newspapers. These articles also invite readers to The Space Place web site. The 3<sup>rd</sup> and 4<sup>th</sup> grade editions of Weekly Reader publish a "Space Place" article each month that sends students to the web site in search of answers to riddles.

In addition, The Space Place outreach team has formed partnerships with over 100 museums, libraries, and planetariums in small communities, and is expanding to include a few zoos and aquariums. These partners agree to feature a unique Space Place display, for which we provide distinctive borders, posters, mission insignias, and other information. In addition, the partners supplement the display with local news, children's art and writing, models, or products created during the four annual "Club Space Place" structured activity events for which we provide the idea and the handouts. The Boys & Girls Clubs of America and the YWCA also participate as Club Space Place partners, distributing the activity guides to their thousands of member chapters. We have also created the first Space Place Collectible Card Game, representing the missions of the New Millennium Program. The card decks are given in limited quantities to Space Place partners for use in Club Space Place award programs.

Activities, contests, and amazing facts on the web site, as well as activities depicted in the ITEA articles and Club Space Place event guides all relate to and explain in simple terms some scientific or technological aspect of a space mission.

By forming partnerships with existing organizations, The Space Place educational outreach program has a potential reach of more than 40 million per year. It provides cross-disciplinary, innovative content to enrich more formal science and technology curriculum, and creates for NASA a youth-oriented, personalized reach that extends into the home and local community.

This paper and presentation will more fully describe and demonstrate this NASA integrated, multi-mission, multi-disciplinary educational outreach program.